

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

DYFAN, LLC,

Plaintiff,

V.

TARGET CORPORATION,

Defendant.

C.A. No. 6:19-cv-00179-ADA

## **DEFENDANT'S OPENING CLAIM CONSTRUCTION BRIEF**

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## I. INTRODUCTION

### A. Overview of the Patents-in-Suit

Although the two Patents-in-Suit claim priority to the '584 Provisional and the '197 Application,<sup>1</sup> the claims of the Patents-in-Suit, as applied by Plaintiff Dyfan, LLC ("Dyfan"), do not resemble the alleged inventions disclosed in those applications. Instead, Dyfan's effort to expand the scope of its claim coverage through the use of functional claiming has caused an unbridgeable divide between the Asserted Claims and the Patents-in-Suit's written description support.

As first described in the '584 Provisional, the original invention purported to improve prior art location-based systems by adding a location-specific header onto, or in lieu of, the existing header of messages, and routing such messages to devices based on information in the location header rather than network (*e.g.*, IP) addresses in the existing header. *See, e.g.*, Ex. A ('584 Provisional) at 18, 21. The '197 Application does not depart from this invention, but was drafted to repeatedly emphasize that the invention concepts were not limited to any particular structure. *See* § I.B *infra*.

Several years thereafter, the applicants amended their claims (in the '197 Application) to introduce broad concepts divorced from the specification's written description of their invention (and the disclosure in either priority document). Presumably, this was an attempt to capture the then existing technology that operated very differently than the invention disclosed in the '584 Provisional or '197 Application. *See* § I.C *infra*. After multiple prior art rejections of these

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<sup>1</sup>“'584 Provisional” refers to U.S. Provisional Patent Application No. 61/517,584 and “'197 Application” refers to U.S. Patent Application No. 13/410,197. With the exception of the “Related Applications” and “Summary” sections, the '197 Application shares a common specification with the '899 Patent and the '292 Patent.

amended claims in the '197 Application, (which rejections were upheld by the Patent Trial and Appeal Board ("PTAB") in 2019), the applicants changed their strategy again by filing "continuation" applications with extremely lengthy claims (each two columns or more) that recited many functional, software-based limitations for which neither the '584 Provisional, nor the '197 Application, disclosed any specific structure or algorithms. *Id.* These "continuation" applications eventually issued as the Patents-in-Suit, *id.*, and an overwhelming majority of the parties' claim construction disputes arise out of these functional, software-based limitations.

## **B. The Invention**

### **1. The Invention Described in the '584 Provisional**

The disclosure of the '584 Provisional makes clear what the inventors believed they invented: adding a location-specific header onto, or in lieu of, the existing header of messages, and routing messages to devices based on information in the location header rather than network (*e.g.*, IP) addresses in the existing header. The Background of the Invention section of the '584 Provisional frames the problem to be solved as the lack of a convenient method of directly sending and receiving messages to a specific physical location:

[C]onventional web based services are based on the Internet Protocol . . . While this approach is highly useful . . . it is inadequate in situations where the terminal addresses may not be known, when the location of terminal changes frequently, or when the network nodes in a localized network may change frequently.

Ex. A at 13.

It is obvious that today's systems do not provide a convenient method of directly sending data messages to a certain physical location, and do not support the efficient collection [of] certain data messages from specified physical locations.

*Id.* at 18; *see also id.* at 16.

The Summary of the Invention section states: "The *present invention* . . . support[s] a *novel approach to network data routing* based on location and various service attributes." *Id.* at

18. Similarly, the Summary states “[a] network formed according to *the present invention resolves internal routing information based on location* . . . such that [the sender may send data to/the user may receive data from] the mobile terminal in proximity of the network I/O unit *based only on* the location attributes of the network I/O unit and the service attributes . . . of the mobile unit.” *Id.* The “Detailed Description” section summarizes the invention’s solution:

The *invention* described herein provides a means and function for *delivering messages to certain physical locations and for collecting data from certain locations*. The approach *uses a location header* in the communication process that a location aware proxy server can understand *to route messages to mobile terminals* via a variety of wireless and wire-line communication networks.

*Id.* at 21.

## 2. The ’197 Application Emphasizes What the Invention is Not

The ’197 Application, which expressly incorporates by reference the “entirety” of the ’584 Provisional,<sup>2</sup> does not depart from the invention of the ’584 Provisional. However, in many instances throughout the specification, the specification emphasizes that the invention concepts are not limited to any particular structure and in doing so, they confirm those structural aspects of the disclosure are not part of the invention.

For example, in describing *all* of the Figures (of which Figures 1-4 and 16-20 were added in the ’197 Application),<sup>3</sup> the specification repeatedly states “the [system/method/message structure/format/interface] may be carried out in *any desired environment*.” In doing so, the ’197 Application emphasizes that “the environment for implementing” the system (*see, e.g., id.* at

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<sup>2</sup> See Ex. B (’197 Application) at [0001]. It is noteworthy that the paragraph numbers in the ’197 Application erroneously increase from [0001] to [0065] on pages 1-14, and then start again at [0001] on page 14 through [00128] on page 124.

<sup>3</sup> Cf. Ex. A, Figures 1-14; Ex. B, Figures 1-20.



[0027] (p. 5), Figure 2) as well as “the environment for carrying out/implementing” the following are *not* part of the invention:

- method of providing a location-based (or relevancy-based) trigger for mobile devices (*see, e.g., id.* at [0031] (p. 6), [0049] (p. 10); Figures 3, 4)
- location and/or relevancy based triggers for mobile devices (*see, e.g., id.* at [0061] (p. 13); Figure 5)
- message structure (*see, e.g., id.* at [0015] (p. 19), Figure 7)
- location/service header format and location/service data encoding format (*see, e.g., id.* at [0019] (p. 20), [0029] (p. 22), [0023] (p. 21), [0031] (p. 22), Figures 8-11)
- hierarchical distribution and collection of information (*see, e.g., id.* at [0011] (p. 18), [0013] (p. 18), Figures 6A-6B)
- location proxy server (*see, e.g., id.* at [0049] (p. 27), Figure 12)
- method for data distribution (*see, e.g., id.* at [0052] (p. 28)), data collection (*see, e.g., id.* at [0065] (p. 31)), or data rebroadcasting (*see, e.g., id.* at [0075] (p. 34), Figures 13-15)
- service/location attribute interface (*see, e.g., id.* at [0089] (p. 38), [0091] (p. 41), Figure 16)
- user information delivery interface (*see, e.g., id.* at [00110] (p. 43), Figure 18)

Additionally, for example, the specification states “every feature disclosed herein . . . is optional.” *Id.* at [0073] (p. 34).

Furthermore, using similar genericizing language, the ’197 Application describes that the following are also *not* part of the invention:

- the network architecture (*see, e.g., id.* at [0025] (p. 5) (“the network 102 may take *any form*”))
  - the protocol, platform, and network for enabling communications between data/content provider and mobile device (*see, e.g., id.* at [0063] (p. 14), [0065] (p. 14), [0001] (pp. 14-15), [0006] (p. 16))
- the type of mobile device (*see, e.g., id.* at [0026] (p. 5), Figure 1, [0038] (pp. 7-8), [00120] (p. 46) (“servers and/or clients may each include . . . *any other type of logic*”))
  - any components of such device (*see, e.g., id.* at [0029] (pp. 5-6), [0030] (p. 6), [0001] (p. 15))

- communication capabilities of such device (*see, e.g., id.* at [0038] (pp. 7-8) (“the mobile device . . . may be *any device* with mobile communication capabilities”), [0052] (p. 11))
- the number of mobile devices performing a method (*see, e.g., id.* at [0038] (p. 8) (“while only one mobile device is referenced below, the present method 300 may be used with respect to a plurality of mobile devices”), [0048] (p. 27), [0055] (pp. 11-12))
- type of network I/O device (*see, e.g., id.* at [0005] (p. 16), [00120] (p. 46))
- location type, manner of identifying location, and type of device which identifies location (*see, e.g., id.* at [0032] (p. 6) (“such location may include *any* location and may be identified in *any desired manner*”), [0035] (p. 7), [0037] (p. 7))
- associating location identifying device with mobile device (*see, e.g., id.* at [0037] (p. 7), [0087] (p. 37))
- type of non-location based (relevancy-based) factor for triggering sending of information to mobile device (*see, e.g., id.* at [0046] (p. 9) (“the information may be communicated . . . based on . . . *any* other parameter, data, etc. capable of being a basis for the communication of the information”))
- type of information communicated to mobile device based on location or relevancy data (*see, e.g., id.* at [0039] (p. 8) (“the information may be *any* type of information capable of being communicated”), [0053] (p. 11), [0016] (p. 19), [00103] (p. 42))
- manner (and protocol) in which information is communicated to mobile device based on location or relevancy data (*see, e.g., id.* at [0040] (p. 8), [0045] (p. 9), [0052] (p. 11) (“the information may be received via *any* type of communication (e.g. *any* protocol, etc.)”), [00120] (p. 46))
  - triggering mechanism for communication of information (*see, e.g., id.* at [0068] (p. 32), [0078] (p. 35))
- device/network component which sends triggering relevancy data to mobile device (*see, e.g., id.* at [0051] (p. 10) (“information and relevancy data may be received from *any device and/or network component*”), [00120] (p. 46))
- type of action carried out by mobile device based on location or relevancy data (*see, e.g., id.* at [0054] (p. 11) (“such action may include . . . and/or *any other act* capable of being carried out, *at least in part*, by a mobile device”))
- criteria used for determining the relevancy of information communicated to mobile device (*see, e.g., id.* at [0058] (p. 12) (“criteria may be used in *any desired manner* to determine the relevancy of the information”))
- technique for implementing headers (service, location) in messages (*see, e.g., id.* at [0017] (p. 19), [0056] (pp. 28-29))

- type of location identified by location header (*see, e.g., id.* at [0021] (p. 20) (“location headers may identify *any* desired locations”))
- data format used to encode location type (*see, e.g., id.* at [0026] (p. 21))
- information in location/service attributes (*see, e.g., id.* at [0041] (p. 25), [0048] (p. 27), [0055] (p. 28))
- portion of message based on location/service attributes (*see, e.g., id.* at [0069] (p. 33) (“*any* other aspect of the message . . . may be based on the location/service attributes and/or parameters”))
- manner in which any interface (including attribute interface and user information delivery interface) is implemented (*see, e.g., id.* at [0097] (p. 40) (“attribute interface 1600 (and *any* other interfaces disclosed herein) may be implemented in *any desired manner*”)).

### C. Dyfan’s Attempt to Expand the Claim Scope Beyond the Invention

As explained above, the alleged invention was adding a location-specific header onto, or in lieu of, the existing header of messages, and routing messages to devices based on information in the location header rather than network (*e.g.*, IP) addresses in the existing header. *See* § I.A *supra*. In and around 2014, the applicants cancelled their claims directed at that concept (in the ’197 Application) and added new claims to recite subject matter presumably in an attempt to make the invention capture then existing technology, rather than the disclosed improvement. An example is:

20. (New) An apparatus, comprising:  
     a wireless component having an identifier, the wireless component configured to broadcast, via a wireless communications protocol, the identifier to at least one mobile device, such that a location of the at least one mobile device is capable of being identified, and an operation is capable of being triggered[*sic*] based on the identifier and the location.

*See* Ex. C (Excerpts of ’197 Application File History) at p. 2 (November 13, 2014 Amendment).

Unlike the disclosed invention of the ’197 Application, the new claims recited a mobile device receiving a broadcasted wireless component “identifier” and/or “triggering an operation” based on this wireless component identifier and an identified mobile device location. *Id.*

These new claims were *not* directed to the disclosed improvement, but rather to existing location-based systems including those described in textbooks, prior art cited by the USPTO, and even systems described in the Background section of the '584 Provisional. For example, as described by the '584 Provisional, in the existing Dedicated Short Range Communications (“DSRC”) system, a mobile device received a broadcasted IP address of a wireless Road Side Unit (“RSU”), the mobile device was identified as being within a local area of the RSU, and various operations were accordingly triggered (*e.g.*, mobile device creating an IP address, and sending and receiving messages with remote servers via the RSU and using its created IP address). *See* Ex. A at 14-16; Figure 2.

After multiple prior art rejections of these added (and subsequently amended) claims (which rejections were ultimately upheld by the PTAB in 2019), the applicants filed a “continuation” application which ultimately issued as U.S. Patent No. 9,973,899 (the “’899 Patent”, *i.e.*, one of the Patents-in-Suit). *See, e.g.*, Ex. C at pp. 8-17 (May 1, 2019 PTAB decision); ’899 Patent at p. 1. In the ’899 Patent, the applicants changed their strategy yet again by drafting extremely lengthy claims (each two columns or more) which recited many functional, software-based limitations for which neither the ’584 Provisional, nor the ’197 Application, disclosed any specific structure or algorithms. *See, e.g.*, ’899 Patent at 29:9-30:63 (cl. 1); 31:44-33:15 (cl. 7); 33:46-35:15 (cl. 9); 35:45-36:57 (cl. 11); § I.A *supra*. The applicants repeated this strategy when they filed the continuation application that ultimately issued as U.S. Patent No. 10,194,292 (the “’292 Patent”, *i.e.*, the other Patent-in-Suit). *See, e.g.*, ’292 Patent at 30:39-32:34 (cl. 1); 39:61-42:19 (cl. 15); 43:30-46:4 (cl. 28); § I.A *supra*.

## **II. DYFAN’S CLAIM OF PRIORITY FOR THE ASSERTED CLAIMS**

It is a bedrock principle of patent law that words of a claim are generally given their “ordinary and customary meaning,” which is the “meaning that the term would have to a person

of ordinary skill in the art in question *at the time of the invention, i.e., as of the effective filing date of the patent application.*” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (emphasis added); *PC Connector Solutions LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1363 (Fed. Cir. 2005) (explaining that a claim term “must be interpreted as of its effective filing date.”). As stated above, both of the Patents-in-Suit (as well as the parent ’197 Application) claim an earliest effective filing date of March 1, 2011, the filing date of the ’584 Provisional, and Dyfan contends that the earliest possible priority date of the asserted claims is at least as early as this date. Moreover, each of the ’197 Application, the ’899 Patent, and the ’292 Patent expressly incorporate by reference the “entirety” of the ’584 Provisional.

Thus, here, the identified claim terms and phrases of the asserted claims should be construed as of March 2011 and in view of the disclosure of the ’584 Provisional. *Phillips*, 415 F.3d at 1312; *see also PC Connector*, 406 F.3d at 1363; *MPHJ Tech. Invs., LLC v. Ricoh Americas Corp.*, 847 F.3d 1363, 1368-1369 (Fed. Cir. 2017); *Vederi, LLC v. Google, Inc.*, 744 F.3d 1376, 1383 (Fed. Cir. 2014) (relying on the disclosure of the provisional application which was “incorporated by reference” into the asserted patents as intrinsic evidence and to refute the district court’s construction). This principle is especially important in disputes as to whether a claim limitation is a means-plus-function limitation according to 35 USC § 112, 6 (hereinafter “§ 112, 6”) and whether an algorithm is disclosed that is clearly linked to a claimed function for computer-implemented means-plus function limitations. *See, e.g., Uniloc USA, Inc., v. Sega of America, Inc.*, No. 2016-2000, 711 Fed. Appx. 986, 990-992 (Fed. Cir. Oct. 23, 2017).

### **III. DISPUTED CONSTRUCTIONS**

As part of the claim construction process, Dyfan did not identify any terms requiring construction and did not provide proposed constructions for any of Defendant’s identified terms. Rather, Dyfan “propose[d] plain and ordinary meaning for all claims” without even identifying

what it contended was the plain and ordinary meaning of any term. Notwithstanding, Defendant understands that the parties' dispute the meaning of each of the terms below because Dyfan would not agree to any of Defendant's proposed constructions.

**A. "Code" / "Computer Code" / "Application" and "System" Limitations Governed by 35 U.S.C. § 112, ¶ 6**

Defendant has identified 25 claim limitations that begin with the word "code" (or a "computer code" or "application" variation), or "system," followed by a function to be performed by the code or system. As identified above, the sheer number and length of these disputed limitations arise directly from Dyfan's prosecution strategy, namely drafting extremely lengthy claims (each two columns or more) that recite many functional, software-based limitations for which neither the '584 Provisional, nor the '197 Application, disclose any specific structure or algorithms. *See* § I.C *supra*. For ease of presentation to the Court, Defendant presents representative terms herein which are dispositive of the parties' disputes regarding these 25 claim limitations.<sup>4</sup> Those disputes relate to whether:

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<sup>4</sup> The same arguments that Defendant makes for the representative claim limitations (§§ III.A.2-5 *infra*) apply to the following claim limitations (and related variations): (1) "code" configured to "cause display of an option" ('899 cls. 1, 7, 9, 11, '292 cls. 1, 15, 28) (Terms 6, 7); (2) "code" configured to "receive an indication of a receipt . . . of the one or more messages" ('899 cls. 1, 7, 9, 11, '292 cls. 1, 15, 28) (Terms 8, 9); (3) "application" configured to "permit a determination as to whether the one or more mobile device application actions including causing to be output the visual information is triggered" ('899 cl. 11) (Term 20); (4) "system" configured such that "the output of the visual information is conditionally caused based on whether a mobile device-specific threshold has been met" ('899 cls. 4, 14, '292 cls. 5, 15) (Term 22); (5) "system" configured such that "the option and the user input permit the user to [determine/influence] whether [the control of the/the] one or more mobile device application actions is [triggered/caused//based on user feedback information]" ('899 cls. 1, 7, 9, 23) (Terms 18, 19, 23) / "system" configured to "output" "both the first visual information and the second visual information . . . based on user feedback information received from a user of the at least one mobile device" ('292 cls. 11, 25) (Term 27); and (6) "system" configured such that "the particular location-relevant information is located based on the at least on value" (Term 30). *See also* n.9 *infra* regarding the "Term" numbering. Defendant also submits herewith the testimony of Dr. Goldberg as additional, supporting evidence for (i) these additional claim limitations being

- (1) the claim language does not connote definite structure for performing the particular recited function (which Defendant contends it does not) such that these terms are governed by 35 U.S.C. § 112, ¶6; and, if so,
- (2) the disclosure at the time of the invention discloses an algorithm for programming a general purpose computer or microprocessor to perform the particular claimed function (which Defendant contends it does not).

1. Canons of Computer-Implemented Functional Claiming under § 112, ¶6

The intent of 35 U.S.C. § 112, ¶6, is to prevent “purely functional claiming,” which is improper. *Function Media v. Google, Inc.*, 708 F.3d 1310, 1319 (Fed. Cir. 2013) (*citing Aristocrat Techs Australia Pty. Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008)). Purely functional claiming – *i.e.*, reciting a functional claim limitation without restricting the limitation to the structure disclosed to support the function – is impermissible because a claim must “particularly point out and distinctly claim the subject matter which the applicant regards as his invention.” *Id.* Otherwise, purely functional claiming “would allow the patentee to claim all possible means of achieving a function.” *Function Media* 708 at 1319 (*quoting Blackboard v. Desire2Learn, Inc.*, 574 F.3d 1374, 1385 (Fed. Cir. 2009)).

a. The Application of § 112, ¶6 Involves a Rebuttable Presumption

Defendant acknowledges that there is a rebuttable presumption that § 112, ¶6 does not apply when the terms in dispute do not include the words “means for.” *See* §§ III.A.2-5 *infra*; *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348-1349 (Fed. Cir. 2015). However, this presumption can be overcome if a party “demonstrates that the claim term fails to ‘recite

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governed by § 112, ¶6, and (ii) rendering all of the asserted claims invalid as indefinite for failure to disclose an algorithm that is clearly linked to performing the respective special purpose function. *See* Goldberg Decl., ¶¶54-78, 105-120, and 142-170.

sufficiently definite structure’ or else recites ‘function without reciting sufficient structure for performing that function.’” *Williamson*, 792 F.3d at 1348 (internal citations omitted). “The standard is whether “the words of the claim are understood by [a POSITA] to have a sufficiently definite meaning as the name for structure.” *Id.* at 1349 (internal citations omitted); *Welker Bearing Co. v. PHD, Inc.*, 550 F.3d 1090, 1096 (Fed. Cir. 2008) (presumption overcome when there is “no structural context for determining the characteristics of the [claim element] other than to describe its function”). In determining whether this presumption has been rebutted, a challenger must establish by a preponderance of the evidence that the claims are to be governed by § 112, ¶ 6. *See Apex Inc. v. Raritan Comput. Inc.*, 325 F.3d 1364, 1372 (Fed. Cir. 2003).

b. “Nonce” Words Are a Substitute for Means

As a matter of well-established Federal Circuit law, a claim term like the word “system” is a “nonce” word, *i.e.*, “a verbal construct that is *not* recognized as the name of structure and is simply a substitute for the term ‘means’”. *Williamson*, 792 F.3d at 1348 (emphasis added); *Welker*, 550 F.3d at 1096; *Joao Control & Monitoring Sys., LLC v. Protect Am., Inc.*, 2015 WL 4937464, \*5 (W.D. Tex. Aug. 18, 2015) (finding “system” is a “nonce” word).<sup>5</sup> Here, the disputed functional claiming limitations of the Patents-in-Suit recite either “code” (or “computer code” or “application”) or “system” for performing various special purpose computer functions. The claims use these different words as interchangeable variations of each other. *See, e.g.*, ’899 Patent at claims 1, 7, 9, 11; ’292 Patent at claims 1, 15, 28. Neither the ’584 Provisional nor the

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<sup>5</sup> *See also, e.g.*, United States Patent and Trademark Office (“USPTO”), “Examining Computer-Implemented Functional Claim Limitations for Compliance with 35 U.S.C. 112,” 84 FR 57, pp. 57-63 (January 7, 2019), available at <https://www.federalregister.gov/documents/2019/01/07/2018-28283/examining-computer-implemented-functional-claim-limitations-for-compliance-with-35-usc-112> (including “system for” in a list of “examples of non-structural generic placeholders that may invoke” § 112, 6.).



'197 Application use the term “computer code.”<sup>6</sup> However, consistent with the asserted claims, the '197 Application uses the words “code” and “application” interchangeably, and refers to both “code” and “logic”<sup>7</sup> for performing identical functions. *See, e.g.*, Ex. B at [0047] (p. 9); [0041]-[0043] (pp. 25-26); [0060]-[0061] (p. 30); [0093] (p. 39); [0097] (p. 40); [00121] (p. 46); claim 1 (p. 48) (“code for identifying a location; and code for communicating information with at least one mobile device, based on the location.”); claim 14 (p. 49) (“logic for identifying a location; and logic for communicating information with the at least one mobile device, based on the location.”); Ex. I (Declaration of Dr. Benjamin Goldberg with Regard to Certain Claim Constructions (“Goldberg Decl.”)), ¶¶40, 54. As such, Defendant’s arguments related to the “code” claim limitations herein apply equally to the “computer code” and “application” variations in the claims. *Id.*

c. Software Functions that Are Not Performed by General Purpose Computers Require Disclosure of an Algorithm Clearly Linked to Perform the Recited Function

It is also well-established Federal Circuit law that, in the context of a special purpose software function<sup>8</sup>, *i.e.*, a function that requires special programming rather than “merely

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<sup>6</sup> The '584 Provisional also does not use the word “code.” And, with the exception of step 1591e of Figure 12 (excerpt reproduced in § III.A.2 below), the '584 Provisional only uses the word “application” in the context of acknowledged prior art “mobile applications” (*see* Ex. A at pp. 11, 16), and in Figure 11 as a component of software 4200 executing on a microprocessor 4100 of a *proxy server* 4000 (*see also id.* at Figure 3, location proxy server 310, 320, 330), *i.e.*, *not* a mobile terminal, where the “main function of the [proxy server] software (4200) is to provide efficient routing of messages from data providers to mobile terminals or from mobile terminals to data aggregators” (*id.* at 30).

<sup>7</sup> In cases where the patent specification and claims use the word “logic” akin to the '197 Application’s use of this word, *i.e.*, as being devoid of a specific structure, courts have found claim terms reciting “logic to” perform a special purpose computer function to be governed by § 112, ¶6. Ex. B at [0026] (p. 5), [0030] (p. 6), [00120] (p. 46), cl. 14 (p. 49); *see, e.g., Egenera, Inc. v. Cisco Systems, Inc.*, No. 16-11613, 2018 WL 717342, \*2, 5-6 (D.Mass. Feb. 5, 2018).

<sup>8</sup> *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012).

plugging in a general-purpose computer,” a mere reference in the specification to software or a general purpose computer cannot constitute sufficient structure to perform such a function. *See, e.g., Noah Sys., Inc. v. Intuit Inc.*, 675 F.3d 1302, 1311 (Fed. Cir. 2012) (“[s]imply disclosing software . . . ‘without providing some detail about the means to accomplish the [recited] function’ is not enough” to avoid an indefiniteness finding); *Blackboard*, 574 F.3d at 1383 (recitation of “any computer-related device or program that performs the function of access control” is not sufficient structure); *Aristocrat*, 521 F.3d at 1332-1333 (recitation of “‘appropriate programming’ imposes *no limitation whatever*” and is clearly not sufficient structure) (emphasis added).

In other words, just as merely reciting “code” in a claim limitation does not constitute sufficient structure to perform a special purpose computer function and avoid the invocation of § 112, 6 (notwithstanding the presumption due to the lack of the word “means”), disclosure in the specification of mere “code” does not constitute sufficient structure to perform such a function and avoid indefiniteness as a matter of law (notwithstanding the presumption of validity). *Id.*; *see also Cypress Lake Software, Inc. v. Samsung Elecs. Am., Inc.*, 382 F.Supp.3d 586, 615-616, 629, 635 (E.D. Tex. May 10, 2019) (finding various claim terms reciting “code for” performing special purpose computer functions to be governed by § 112, 6); *Global Equity Mgmt. (SA) Pty. Ltd. v. Expedia, Inc.*, 2016 WL 7416132, \*29-30, 31, 32-33 (E.D. Tex. Dec. 22, 2016) (finding various claim terms reciting “program code for” performing special purpose computer functions to be governed by § 112, 6); *Advanced Ground Info. Sys. v. Life360, Inc.*, No. 14-80651, 2014 WL 12652322, \*6-7, 8 (S.D. Fla. Nov. 21, 2014) (finding various claim terms reciting “CPU software for” performing special purpose computer functions to be governed by § 112, 6), *aff’d on other grounds*, 830 F.3d 1341 (Fed. Cir. 2016). Here, each of the

particular functions recited in the representative limitations (“causing to be output . . . the visual information”, “cause to be output . . . the second visual information”, “cause” “subsequent output of different visual information”, and “automatically cause to be output” “the visual information”) cannot be performed by a computer unless the computer is programmed with a special algorithm. *See* Goldberg Decl., ¶¶81, 94, 126, 135; §§ III.A.2-5.

Despite this Federal Circuit precedent, Dyfan may allege that “code” (and the “computer code” and “application” variations), as recited in a claim, may constitute sufficient structure to perform a function. Whether that is theoretically correct in certain circumstances is of no moment here. Indeed, as detailed above, the ’197 Application emphasizes that any structural aspects of the disclosure are neither important nor part of the invention. *See* §§ I.B.1-I.B.2 *supra*. Thus, there is a stronger public interest basis for finding that these claim limitations must be governed by § 112, 6 to foreclose Dyfan’s impermissible attempt to “claim all possible means of achieving” these particular recited functions, which are also divorced from the actual purported and disclosed invention (*see* §§ I.B.1, I.C). *See Function Media*, 708 F.3d 1319; *Aristocrat*, 521 F.3d at 1333.

d. If an Algorithm Is Required and Absent, the Claim Is Indefinite.

When § 112, ¶ 6 applies to a claim limitation and the corresponding structure is software that cannot be performed by a general-purpose computer, the Court must decide, as part of its claim construction analysis, whether the claims are invalid as indefinite because the patentee failed to provide an algorithm for the software function. *See Function Media*, 708 F.3d at 1318; *Noah*, 675 F.3d at 1311; *Aristocrat*, 521 F.3d at 1332-1333. An algorithm is “a step-by-step procedure for accomplishing a given result.” *Ergo*, 673 F.3d at 1365. Any such algorithm must be “clearly linked” in the specification to the function recited in the claim to qualify as a “corresponding structure” under §112, ¶6. *See B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d

1419, 1424 (Fed. Cir. 1997); *Noah*, 675 F.3d at 1318. The failure of the specification to disclose an algorithm sufficient to perform the entirety of the recited function cannot be supplanted by expert testimony. *Noah*, 675 F.3d at 1312, 1318-1319; *Function Media*, 708 F.3d at 1318; *Blackboard*, 574 F.3d at 1371. It is also irrelevant whether a POSITA could readily develop a program, or determine how to construct an algorithm, to perform the function. *Noah*, 675 F.3d at 1317; *Function Media*, 708 F.3d at 1319; *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1366-67 (Fed. Cir. 2008).

2. “code” configured to “cause to be output, via the at least one mobile device, the visual information based on the particular location-relevant information” “[in response to /after] the receipt of the response message including the particular location-relevant information” (’899 cls. 1, 7, 9, 11; ’292 cls. 1, 15, 28) (Terms 10, 11, 12<sup>9</sup>)

As described above, the claim term “code” cannot itself constitute sufficient structure to perform this recited, special purpose function. *Id.*; § III.A.1.c *supra*. As further illustrated below, and supported by the testimony of Dr. Goldberg, this representative “code” limitation should be governed by § 112, ¶6 because the claim language does not connote to a POSITA definite structure for performing the particular recited function.<sup>10</sup> Goldberg Decl., ¶¶80-86;

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<sup>9</sup> The parties agreed to number the claims limitations presented in their respective briefing based on the order in which the limitations were presented by Defendant in its Disclosures Regarding Proposed Claim Constructions served on Dyfan on August 27, 2019 (attached as Ex. H). Defendant notes that, as a compromise and to reduce the number of disputes before the Court, it dropped its dispute regarding the claim limitation “influence whether the one or more mobile device actions is caused” in ’899 Patent claims 7 and 9. As a result, that claim limitation is not counted by either party. Consistent with the parties’ agreement, Defendant also references, in the headings of §§ III.A.2-III.F, each of the claim limitations by its corresponding number in Ex. H. *See, e.g.*, Ex. H at pp. 7-9; § III.A.2 as “Terms 10, 11, 12”.

<sup>10</sup> The parties do not appear to dispute the above identification of the function of this representative “code” claim limitation. Similarly, the parties do not appear to dispute the below identification of the function of the other representative “code” limitation (*see* § III.A.3 *infra*) nor of the representative “system” limitations (*see* §§ III.A.4-5 *infra*).

*Williamson*, 792 F.3d at 1348; *Noah*, 675 F.3d at 1311; *Blackboard*, 574 F.3d at 1383; *Aristocrat*, 521 F.3d at 1332-1333; *see also* § III.A.1.c.

For the '899 Patent claims, the surrounding claim language additionally specifies that a “server” “locates/retrieves” the particular “location relevant information” “in response to” the server receiving “at least one value” in “one or more messages” from the mobile device, and where the mobile device previously received “the at least one value” as part of “one or more messages” from a “broadcast short range communication unit.” Goldberg Decl., at ¶¶80-83. Likewise, for the '292 Patent claims, the surrounding claim language additionally specifies that a “server” “retrieves” both the “first” and “second” “location relevant information” “in response to” the server receiving “at least one message” from the mobile device, and where “the at least one message” does not pass through either the “first” or “second” “broadcast short-range communication unit.” *Id.*

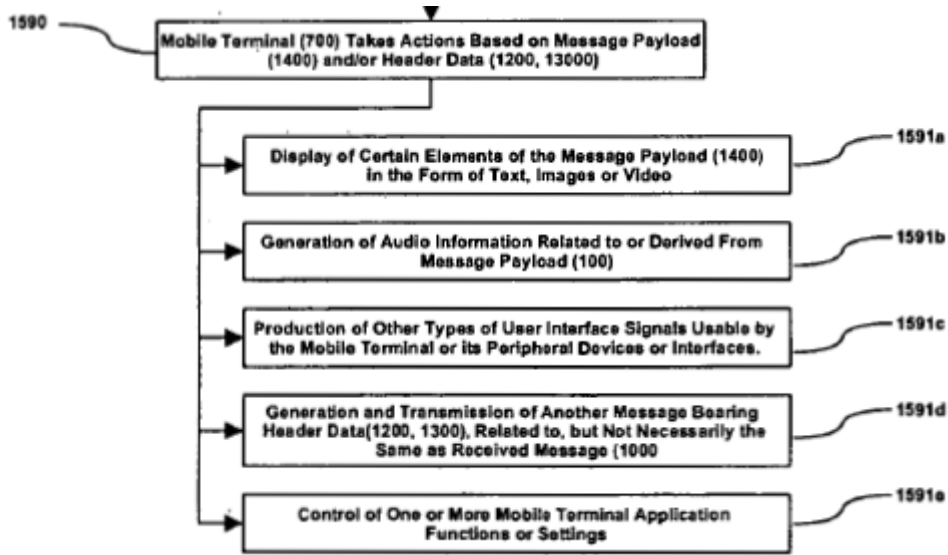
Not only is the foregoing claim language divorced from the purported invention of routing messages to devices based on a location-specific header (*see* §§ III.B.1, III.C), it also does not identify in the claim any specific structure, programming or algorithm to “***cause to be output***, via the at least one mobile device, ***the visual information based on*** the particular location-relevant information” and “[in response to /after] the receipt of the response message [from the server] including the particular location-relevant information.” Goldberg Decl., ¶¶80-85.

Thus, as the recited “code” is only defined by its recited, special purpose function, and as the claims do not otherwise recite the specific algorithm or programming that performs this particular function, this claim term should be governed by § 112, ¶6. Goldberg Decl., ¶86; *Williamson*, 792 F.3d at 1348; *Noah*, 675 F.3d at 1311; *Blackboard*, 574 F.3d at 1383;

*Aristocrat*, 521 F.3d at 1332-1333; *Cypress Lake*, 382 F.Supp.3d at 615-616, 629, 635; *Global Equity*, 2016 WL 7416132 at \*29-30, 31, 32-33; *Advanced Ground*, 2014 WL 12652322 at \*6-7, 8.

Given that § 112, ¶6 should apply, the next step is for the Court to identify the structure or algorithm for performing that function and that is disclosed in the written description as of the time of the invention. If not such structure or algorithm is disclosed, the Court should find that the functional limitation renders the asserted claims invalid as indefinite. Here, the written description as of Dyfan's contended time of the invention (March 2011), did not disclose any specific structure, algorithm or programming that performs the entirety of this function, which is representative of the disputed functional limitations. *Goldberg Decl.*, ¶¶87-92; *Uniloc*, 711 Fed. Appx. at 990-992; *Function Media*, 708 F.3d at 1318; *Noah*, 675 F.3d at 1311, 1318-1319; *Aristocrat*, 521 F.3d at 1332-1333; *see also, e.g., Cypress Lake*, 382 F.Supp.3d at 617-620, 629-631, 635; *Global Equity*, 2016 WL 7416132 at \*29-30, 31, 32-33; *Advanced Ground*, 2014 WL 12652322 at \*6-7, 8-9.

Dyfan may point to Figure 12 (reproduced below) of the '584 Provisional as an algorithm for performing this function. Figure 12 and the corresponding text disclosed that a mobile terminal "takes actions" based on "message payload" or "header data" in a "message broadcast from, or sent by, Network I/O Unit (420, 520, 620)," and where "[s]uch actions may include, singly, collectively, and in any order":



Ex. A at p. 24, Figure 12; Goldberg Decl., ¶88.

While this portion of Figure 12 might qualify as a “flowchart,” it states only high level results of undisclosed programming steps, none of which include a sufficiently precise description of the step-by-step procedure clearly linked to perform the function of “*causing to be output . . . the visual information based on* the particular location relevant information” (*i.e.*, based on the information received in the “response message” from “the at least one server”). Goldberg Decl., ¶89; *Noah*, 675 F.3d 1318-1319; *Ergo*, 673 F.3d at 1365; *B. Braun*, 124 F.3d at 1424. In other words, this disclosure is insufficient for performing the claimed function.

If Dyfan attempts to overcome this deficiency by contending that the invention date is the filing date of the ’197 Application, so as to enable the use of that application as the written description rather than the ’584 Provisional, the result will be the same. The subject matter added in the ’197 Application is simply generic and void of structure. § I.B.2 *supra*; Goldberg Decl., ¶¶90-92.

For example, the specification of the ’197 Application describes that the “location based trigger for a mobile device” of Figure 3 generically involves identifying location (step 302) “in

any desired manner”, and, based on the identified location, using “any type of communication” to communicate “any type of information capable of being communicated” with “any device with mobile communication capabilities” (step 304). § I.B.2 *supra*; Goldberg Decl., ¶¶45-46, 91. Likewise, the specification describes that the “relevancy based trigger for a mobile device” of Figure 4 generically involves receiving, “from any device and/or network component” via “any type of communication”, “any type of information” and “any data that is related to relevancy of [such] information”, where “such relevancy may be with respect to any criteria . . . associated with the mobile device or user” and “the criteria may be used in any desired manner to determine the relevancy of the information”, (step 402), and, based on such data, performing “any other act capable of being carried out, at least in part, by a mobile device” (step 404). § I.B.2 *supra*; Goldberg Decl., ¶¶47-48, 91. Moreover, the specification generically describes that *all* of the methods, systems, and interfaces (depicted in Figures 2-20) “may be carried out in any desired environment” and describes “every feature disclosed herein” as “optional.” § I.B.2 *supra*; Goldberg Decl., ¶¶42-44, 91.

Because, at the time of the invention, the disclosure did not explain any specific algorithm that is clearly linked to performing this representative function, this disputed term renders all of the asserted claims indefinite. *Uniloc*, 711 Fed. Appx. at 990-992; *Function Media*, 708 F.3d at 1318; *Noah*, 675 F.3d at 1311, 1318; *Aristocrat*, 521 F.3d at 1332-1333; *see also, e.g., Cypress Lake*, 382 F.Supp.3d at 617-620, 629-631, 635; *Global Equity*, 2016 WL 7416132 at \*29-30, 31, 32-33; *Advanced Ground*, 2014 WL 12652322 at \*6-7, 8-9.

3. “code” configured to “cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” (i) “[in response to /after] the receipt of the response message including the second location-relevant information”, (ii) “after the first visual information is caused to be output based on the first



location-relevant information,” and (iii) “after the at least one mobile device is moved in the building” (’292 cls. 1, 15, 28) (Terms 13, 14, 15)

In the same way that none of the (i) claim term “code”, (ii) the surrounding claim language, nor (iii) the disclosure at the time of the invention, disclosed the specific algorithm clearly linked to performing the first “cause to be output” function (*see* § III.A.2 *supra*), none of (i) – (iii) above provide even a general explanation (much less a specific algorithm) for the more complex, representative function recited in all of the ’292 Patent independent claims: “***cause to be output***, via the at least one mobile device, ***the second visual information based on*** the second location-relevant information” (i) “[in response to /after] the receipt of the response message including the second location-relevant information” (from the “at least one server”), (ii) “***after the first visual information is caused to be output based on the first location-relevant information***,” and (iii) “***after the at least one mobile device is moved in the building***.” Goldberg Decl., ¶¶93-105.

As such, and for at least the identical reasons identified in § III.A.2 above, this limitation should be governed by § 112, ¶6, and renders all of the ’292 Patent asserted claims indefinite. Goldberg Decl., ¶¶93-105.

4. “system” configured to “cause” “subsequent output of different visual information” at least (i) “after the indication of the user input is received”, and (ii) “after an initial instance of the output of the visual information is caused” (’899 cls. 1, 7, 9, 11, 25; ’292 cl. 12) (Terms 16, 17, 21, 28, 29)

Even more egregious than Dyfan’s prosecution strategy to add the many functional software-based limitations to the claims (*see, e.g.,* §§ I.C; III.A.2-3 *supra*), in this representative claim limitation, the claim language does not even specify that the recited “code” performs the additional, representative function of “caus[ing]” “subsequent output of different visual information” at least (i) “after the indication of the user input is received”, and (ii) “after an initial instance of the output of the visual information is caused” (and, for certain claims (*e.g.,*

'899 Patent claims 1, 7, 9, 25), also (iii) “without requiring [necessitating] additional subsequent user input”). Goldberg Decl., ¶¶125-126, 128-130. Rather, all of the '899 Patent independent claims use the well-recognized “nonce” word of “system”, and do not specify whether any particular one of the recited “building”, “short-range communications unit”, “plurality of mobile devices”, “code” or “server” components of the “system”, or any particular combination of these “system” components, performs this additional, special purpose software function. Goldberg Decl., ¶¶125-130; *Williamson*, 792 F.3d at 1348; *Welker*, 550 F.3d at 1096; *Joao Control*, 2015 WL 4937464 at \*5; *see also* § III.A.1.b *supra*.

This example is the epitome of purely functional claim drafting and, therefore, requires that this limitation be governed by § 112, ¶ 6. *Id.*; *Function Media* 708 at 1319; Goldberg Decl., ¶¶125-131. And like the aforementioned “code”-based “caus[ing] to be output” functions (§§ III.A.2-3 *supra*), this additional “caus[ing]” “subsequent output” function is both divorced from the purported invention as well as the disclosure in the '584 Provisional and '197 Application. *See* §§III.B-III.C; Goldberg Decl., ¶¶132-133. For at least the same reasons that there is no disclosure of any specific algorithm clearly linked to performing either of the “code”-based “caus[ing] to be output” functions (§§ III.A.2-3 *supra*), and additionally because the claim language here does not even limit the corresponding structure to software executing on a particular component, or combination of components, of the “system”, all of the asserted claims of the '899 Patent are invalid as indefinite for the patentee’s failure to disclose any definite structure clearly linked to this additional, special purpose function. Goldberg Decl., ¶¶132-133; *Function Media*, 708 F.3d at 1318; *Noah*, 675 F.3d at 1311; *Aristocrat*, 521 F.3d at 1332-1333.

5. “system” configured to “automatically cause to be output” (i) “the first visual information” “without requiring communication of the [at least one / first] message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first

broadcast messages” and (ii) “the second visual information” “without requiring communication of the [at least one / second] message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages.” (’899, cls. 18, 19; ’292 cls. 1, 8, 15, 21, 28) (Terms 23, 24, 25)

Similar to the representative “system” limitation for the ’899 Patent asserted claims (§ III.A.4 *supra*), the above limitation, present in all of the 292 Patent independent claims, also epitomizes purely functional claiming as it again uses the “nonce” word “system”, and does not even specify whether any particular component, or combination of components, of such “system” performs these additional, special purpose software functions of “automatically caus[ing] to be output” (i) “the first visual information” “without requiring communication of the [at least one / first] message with the first broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more first broadcast messages”, and (ii) “the second visual information” “without requiring communication of the [at least one / second] message with the second broadcast short-range communications unit after the receipt of the indication of the receipt of the one or more second broadcast messages.” *See* Goldberg Decl., ¶¶134-140.

Again, like the aforementioned “code” based “caus[ing] to be output” functions (§§ III.A.2-3 *supra*), these additional “automatically caus[ing] to be output” functions are both divorced from the purported invention as well as the disclosure in the ’584 Provisional and ’197 Application. *See* §§ III.B-III.C; Goldberg Decl., ¶¶141-142. For at least the same reasons that there is no disclosure of any specific algorithm clearly linked to performing either of the code”-based “caus[ing] to be output” functions (§§ III.A.2-3 *supra*), and additionally because the claim language here does not even limit the corresponding structure to software executing on a particular component, or combination of components, of the “system”, all of the asserted claims of the ’292 Patent are invalid as indefinite for the patentee’s failure to disclose any definite

structure clearly linked to these additional, special purpose software functions. Goldberg Decl., ¶¶141-142; *Function Media*, 708 F.3d at 1318; *Noah*, 675 F.3d at 1311; *Aristocrat*, 521 F.3d at 1332-1333.

**B. “identifier including at least three fields” (’899 cl. 1) (Term 3)**

Defendant’s construction of this phrase (“identifier subdivided into at least three data locations”) is the plain and ordinary meaning in the context of the Patents-in-Suit at the time of the invention. The surrounding claim language specifies that the claimed “identifier” is both “store[d]” and transmitted as part of a “message”: “broadcast . . . the one or more messages including the address portion and the identifier including the at least three fields.”

Both the ’584 Provisional and the ’197 Application use the term “identifier” in the context of a “location identifier” or a “service identifier” as depicted in Figures 8 and 9. Ex. B at Figures 8, 9; [0020] (p. 20), [0030] (p. 22), [0054] (p. 28); Ex. A at pp. 28-29, Figures 7, 8. Neither specification uses the term “field” in the context of an “identifier” (or even a “message” or a “header”); however, Figures 8 and 9 depict the subdivision of a “message” (and a “location header”, “service header”, “location data”, and “service data”, in such message) into discrete data locations (*e.g.*, “location header” subdivided into three data locations: “location identifier”, “location type”, and “location data”). *Id.* The specifications’ description is consistent with the meaning of “field” that was established in the art. *See, e.g.*, Ex. D (Newton’s Telecom Dictionary, 11th edition, July 1996) at 251 (“field” means “the specific location of data within a record . . . a field is one of the basic subdivisions of a record”).

Thus, Defendant’s construction should be adopted.

**C. “an address portion” (’899 cls. 1, 7, 9, 11, 30; ’292, cl. 4) (Term 4)**

Defendant’s construction of this phrase (“a header identifying the destination of the message”) is again the plain and ordinary meaning in the context of the Patents-in-Suit at the

time of the invention. As illustrated above (§ III.B), the surrounding claim language specifies that the “address portion” is transmitted as a portion of a message. *See also, e.g.*, ’899 Patent at cl. 11 (“broadcast . . . the one or more messages including the address portion and the plurality of fields.”)

As also described above (§§ I.B.1-I.B.2), both the ’584 Provisional and the ’197 Application use the term “address” in the context of well-known network (*e.g.*, IP) addresses in the headers of existing messages (rather than the messages’ payloads), which were used to route messages to their intended destination. *See* Ex. A at 12, 13, 15-17, 23 (message “addressed by using a TCP/IP or UDP/IP address header or any other networking address header”). As also described above, the invention involved adding a location-specific header to existing messages and routing messages to devices based on such header. §§I.B.1-I.B.2 *supra*. Indeed, the ’584 Provisional also describes this location-specific header as an “address” in which “a message might be ‘addressed’” to a particular location as its destination (rather than an IP address). *See, e.g.*, Ex. A at 20 (“a message bearing a place attribute ‘address’ would be automatically routed to the network address of the outlet or outlets in the vicinity of the [corresponding] place”), 20 (“a message might be ‘addressed’ to all pizza stores within a geographic region, or all 4-way intersections in a geographic, or jurisdictional region”), 21 (“location addressed data”), 23 (“Location Proxy address header (1100)”), Figure 6 (“address header 1100”), Figure 12 (steps 1520, 1540, 1550). Likewise, the ’197 Application uses “address” in the context of a message header and as identifying the destination of the message. *See, e.g.*, Ex. B at [0002] (p. 15), [0007] (pp. 16-17) (“messages may be sent to . . . locations (*e.g.* instead of specific network addresses)”), [0017] (p. 19) (“message structure 700 further includes an address header 701 which is a location proxy address header that designates the location proxy server . . . to which

the message is to be sent [and] a location header 703 which addresses the payload message 701 to a specific location.”), [0033] (p. 23), [0054] (p. 28), [0056] (pp. 28-29). The specifications’ description is also consistent with the established meaning of “address” in this context in the art. *See, e.g.*, Ex. C (Newton’s Telecom Dictionary, 22<sup>nd</sup> edition, Feb. 2006) at 26 (“[a]n address is the destination of a message sent through a communications system”).

Thus, Defendant’s construction should be adopted.

**D. “shopping mall” (’899 cls. 2, 7, 12, 30; ’292 cls. 4, 13, 26, 29) (Term 2)**

It is hard to fathom that the term “shopping mall” is the subject of a claim construction dispute, but given Dyfan’s infringement contentions and claim construction position, that is the case. Defendant contends that a “shopping mall” would be understood by a POSITA as “a building containing two or more distinct and independent retail stores.” Neither the ’584 Provisional nor the ’197 Application change the well-understood meaning of “shopping mall”; rather, both simply reference this term in passing. *See, e.g.*, Ex. A at 30; Ex. B at [0040] (pp. 24-25). Dyfan’s Infringement Contentions, on the other hand, apply the shopping mall limitation to a standalone Target® *store* thereby confirming that their construction is something other than the plain and ordinary meaning of the term. *See, e.g.*, Ex. F (Excerpts of Dyfan’s First Set of Infringement Contentions for the ’899 Patent) at pp. 45-46; Ex. G (Excerpts of Dyfan’s First Set of Infringement Contentions for the ’292 Patent) at p. 105; *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

Accordingly, Dyfan’s interpretation should be rejected through a construction of this term, as proposed by Defendant.

**E. “building including a plurality of facilities therein” (’292 cls. 1, 15, 28) (Term 1)**

The basic dispute between the parties appears to be whether a “building” with a “plurality of facilities therein” should be construed to broadly encompass two or more departments as applied by Dyfan, or “two or more distinct venues or stores, each built, installed, or established to serve a particular purpose, brand or company” as Defendants propose.<sup>11</sup> Defendant’s construction of this phrase flows from the inventors’ disclosure at the time of the invention (the ’584 Provisional) and is consistent with the disclosure of the ’197 Application (filed one year later, in March 2012).

The term “facility” is not used in the ’584 Provisional, and its usage in the specification of the ’197 Application is consistent with a “facility” meaning “a distinct venue or store built, installed, or established to serve a particular purpose, brand or company.” *See* Ex. B at [0034] (p. 7) (“The logical attributes may be *types of venues* (e.g. sports *facilities*, theatres, parks, etc.), categories of retail stores or service venues (e.g. shoe stores, drug stores, clothing stores, hobby stores, sports clubs, etc.), *facilities* associated with a specific brand (e.g. all *facilities* associated with a given brand or company).”) (emphasis added). Consistent with this meaning, the only “building” in which either priority document disclosed any embodiments of the invention achieving an outcome or result related to *internal* locations is an “airport” or “shopping mall”, *i.e.* buildings which respectively contain two or more distinct venues or stores, each built, installed, or established to serve a particular purpose, brand or company. Ex. A at pp. 29-30; Ex.

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<sup>11</sup> This limitation only is found in dependent claims. The corresponding ’292 independent claims do not recite “facilities”; rather, these claims recite that (1) the “building” include “first” and “second” “broadcast short-range communication units”, and (2) the function of “code” to “cause to be output, via the at least one mobile device, the second visual information” after, in part, “the at least one mobile device is moved in the building.” *See also* §§ III.A.3 *supra*.

B at [0040] (pp. 24-25) (same). Thus, Defendant’s construction flows from the applicants’ disclosure at the time of the invention. *See, e.g., Phillips*, 415 F.3d at 1312; *PC Connector*, 406 F.3d at 1363. Defendant’s construction is also consistent with the established meaning of “facility.” *See, e.g., Ex. E* (Merriam Webster’s Collegiate Dictionary, 10<sup>th</sup> edition, 1993) at 416 (“facility” means “something (as a hospital) that is built, installed, and established to serve a particular purpose”).

The parties’ dispute arises simply because Dyfan has attempted to stretch the meaning of this phrase to encompass an individual Target® store that includes internal departments (*e.g.*, clothing, houseware, jewelry, electronics). *Ex. G* at p. 2. And Dyfan will undoubtedly point to dependent claim 13 and 16’s recitation of a “retail space” and “different locations in the retail space” as compelling this broader construction. However, in cases like this one, where Dyfan contends the claims are entitled to an earlier priority date, the prosecution history (and drafting of claims more than 7 years after such date) cannot be used to broaden claim scope beyond the disclosure at the time of the invention. *Phillips*, 415 F.3d at 1312; *PC Connector*, 406 F.3d at 1363; *see also Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1300 (Fed. Cir. 2015), *overruled on other grounds by Aqua Prods. v. Matal*, 872 F.3d 1290, 1336 (Fed. Cir. 2017). Dyfan’s attempt to have its cake and eat it too, *i.e.*, rely on an earlier priority date to attempt to avoid prior art while drafting claims to attempt to cover something divorced from its disclosed invention, should be rejected<sup>12</sup>.

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<sup>12</sup> As mentioned above, outside of the “address portion”, recited among a laundry list of alternative limitations over 7.5 columns long in a single dependent claim (claim 4) in the ’292 Patent (and which should be construed as proposed in § III.B *supra*), the claims of the ’292 Patent do not require adding a location-specific header onto, or in lieu of, the existing header of messages, and routing messages to devices based on information in the location header. *See* §§ III.B.1, III.C.



**F. “output, via the at least one mobile device” / “causing to be output, via the at least one mobile device” / “cause to be output, via the at least one mobile device” (’899 cls. 1, 7, 9, 11; ’292 cls. 1, 15, 28) (Term 5)**

Defendant’s constructions of these related phrases (“delivering from the at least one mobile device” / “causing the delivery from the at least one mobile device”) flows from the claim language and is consistent with the disclosure at the time of the invention. Each of the claims-at-issue recite both “*output*, via the at least one mobile device” and “*display* . . . via a display of the at least one mobile device” functions of “code.” *See also* §§ III.A.2-III.A.3 *supra*. Therefore, these different terms presumably have different meanings. *See, e.g., Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1579 (Fed. Cir. 1996). The surrounding claim language also specifies that the “output” function is “[in response to /after] the receipt of the response message including the particular location-relevant information.”

While the ’584 Provisional does not disclose a particular algorithm that is clearly linked to this “output” function (*see* §§ III.A.2-III.A.3 *supra*), it does disclose a similar outcome or result, namely the transmission of location information in the header of a received message from the mobile device to another mobile device or an I/O device. Ex. A at FIG. 12 (step 1591d), FIG. 13 (step 1600), FIG. 14 (steps 1720, 1790). Therefore, Defendants’ construction flows from the language of the claims and the disclosure at the time of the invention. *See, e.g., Phillips*, 415 F.3d at 1316 (“The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.”)

Defendant’s construction should thus be adopted.

Date: September 26, 2019

/s/ Gilbert A. Greene

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**CERTIFICATE OF SERVICE**

I certify that on September 26, 2019, I electronically filed the foregoing with the Clerk of Court using the CM/ECF system, which will send notification of such filing to all counsel of record.

/s/ Gilbert A. Greene